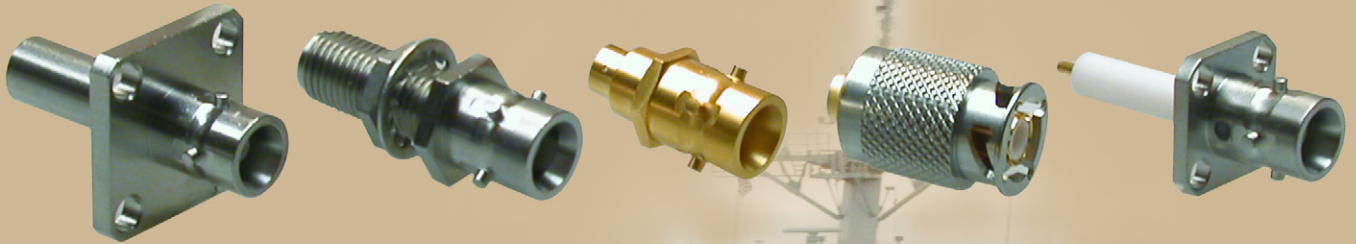
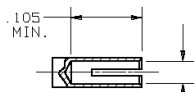
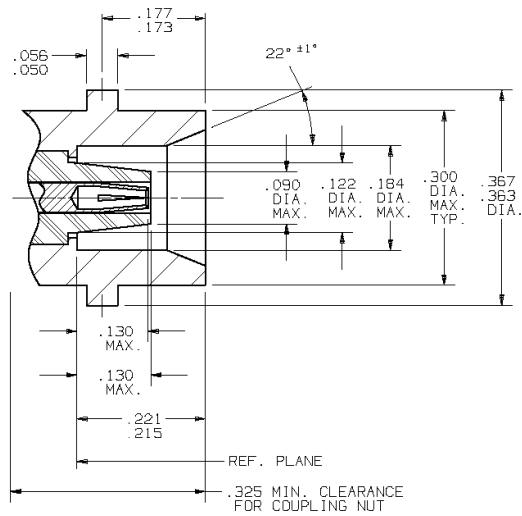


# SV MICROWAVE®

ZMA Connectors & Components



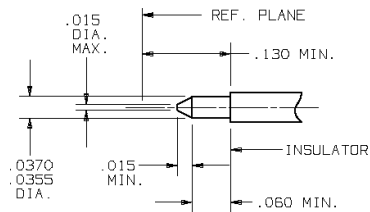
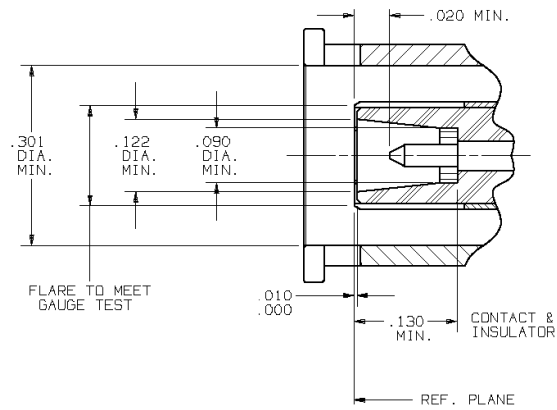
## Interface Mating Dimensions\*



DIM TO MEET VSWR, MATING CHARACTERISTICS, AND CONNECTOR DURABILITY WHEN MATED WITH A .0370/.0355 DIA. PIN.

**Jack**

\* High power.



**Plug**

## Specifications

### General

Material: Steel corrosion resistant per ASTM-A-582 and SAE-AMS-5640, Type 303. Beryllium copper per ASTM-B-196. PTFE per ASTM-D-1710.

Finish: Center contacts shall be gold plated in accordance with MIL-G-45204, Type I, Grade C. All other metal parts shall be finished to meet corrosion requirements.

Note: Only representative outlines are shown. Contact factory for specific outline drawings.

### Electrical

Insulation Resistance: 10,000 Megohms Min.

Corona Level: 625 VRMS Low Power; 1,000 VRMS High Power

DWV: 2,500 VRMS Low Power; 4,000 VRMS High Power

RF High Potential: 1,675 VRMS Low Power; 2,667 VRMS High Power

VSWR: 1.15:1, DC-12.4 GHz Low Power; 1.07:1, DC-3 GHz High Power

RF Leakage: -90dB Min.

Insertion loss:  $.03 \times \sqrt{f}$  (GHz)

Power Handling (avg.): 220 Watts Average at 1.3 GHz; 2700 Watts Peak

Power Handling (pulse): 6.5 KW at 40,000 ft at 2 GHz; 1 microsecond pulse width; 1% duty cycle

### Environmental

Vibration: Specification MIL-STD-202, Method 204, Test Condition D

Shock: Specification MIL-STD-202, Method 213, Test Condition I

Thermal Shock: Specification MIL-STD-202, Method 107, Test Condition B.

Corrosion (Salt Spray): Specification MIL-STD-202, Method 101, Test Condition B.

Moisture Resistance: Specification MIL-STD-202, Method 106. No measurements at high humidity. Insulation resistance shall be at least 200 megohms within 5 minutes of removal from humidity.

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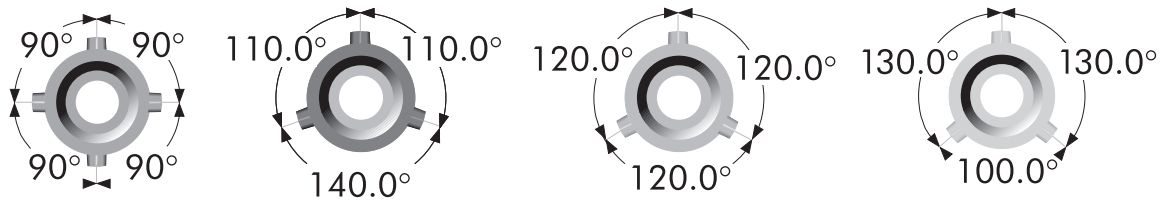
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# ZMA CONNECTORS AND COMPONENTS

## Features

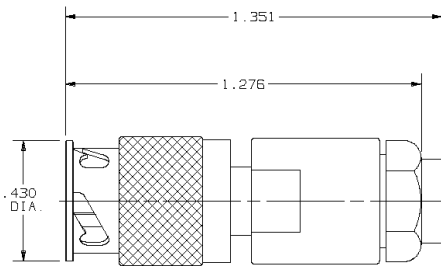
- Three types available
  - 3.0 GHz, 6.7 kW @ 40,000 ft and 250 W CW
  - 12.4 GHz, stainless steel body for harsh military environments
  - 12.4 GHz, brass body for telecommunications applications
- Ideal for extreme vibration applications at microwave frequencies
- Overlapping interface dielectric ideally suited for high-power/high-voltage applications
- Bayonet coupling installs with just 1/4 turn
- Internal alignment and spring forces comparable to those of blindmate connectors
- Mated by hand – no special tooling required
- 3-lug and 4-lug latching mechanism for mechanical stability
- Multiple keying options prevent improper mating of assemblies

## Keying Options\*

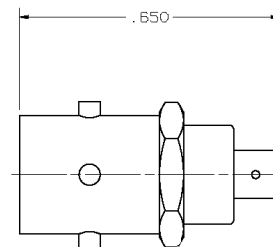


\*The standard scheme is 90°.

## Cable Connectors



SF8707-6122



SF8725-6002

Part Number	Description	Frequency (GHz)	Cable	Style	Keying Scheme*
SF8704-6002	ZMA Plug	DC – 12.4	.085 Semi-Rigid	High Freq.	90°
8725-6002	ZMA Jack	DC – 12.4	.085 Semi-Rigid	High Freq.	90°
SF8704-6001	ZMA Plug	DC – 12.4	.141 Semi-Rigid	High Freq.	90°
SF8704-6000	ZMA Plug	DC – 3.0	.141 Semi-Rigid	High Power	90°
8725-6001	ZMA Jack	DC – 12.4	.141 Semi-Rigid	High Freq.	90°
SF8707-6122	ZMA Plug	DC – 3.0	Semflex HP290S	High Power	90°
SF8707-6121	ZMA Plug	DC – 3.0	Semflex HP120	High Power	90°
SF8702-6107	ZMA Plug	DC – 3.0	Semflex HP190	High Power	90°
SF8717-6024	ZMA Right Angle Plug	DC – 3.0	Semflex HP290S	High Power	90°
SF8712-6501	ZMA Right Angle Plug	DC – 3.0	RG-58/U	High Power	90°

\* Other keying schemes available.  
Contact factory for brass equivalents.

Semflex is a trademark of Semflex, Inc.

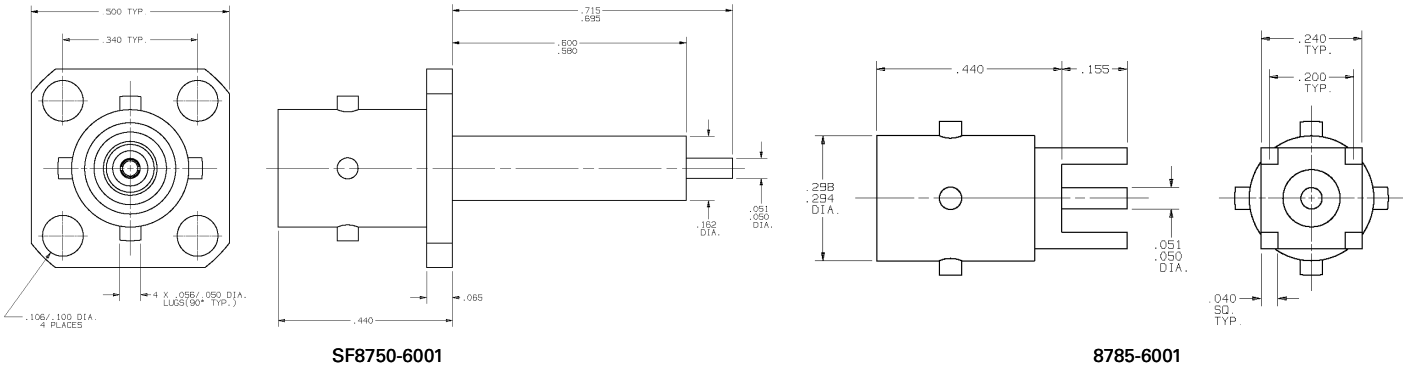
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# ZMA CONNECTORS AND COMPONENTS

## Receptacles

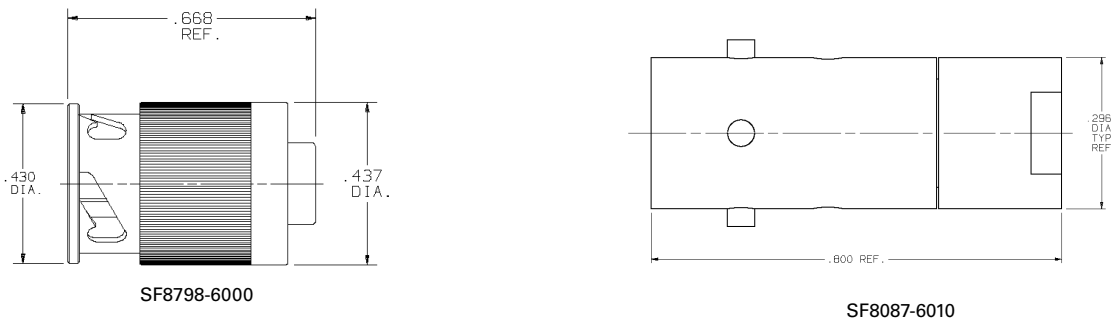


Part Number	Description	Keying Scheme**	Part Number	Description	Keying Scheme**
SF8750-6001	ZMA Jack 4-Hole Flange	90°	SF8770-6007	ZMA Jack*	90°
8778-6000	ZMA Jack Hermetic	90°	8785-6001	ZMA Jack PCB Mount	90°

\* Threaded receptacle accepts .020 (.5mm) dia. pin Contact factory for brass equivalents.

\*\* Other keying schemes available.

## Terminations and Dustcaps



Part Number	Description	Keying Scheme*
SF8087-6009	ZMA Plug Termination	90°
SF8087-6010	ZMA Jack Termination	90°
SF8798-6000	ZMA Plug Dust Cap	90°

Calibration Kit available. Ask for part number 8700-CALKIT.  
\* Other keying schemes available.

Contact factory for terminations with chains.

## Adapters

Part Number	Description	Keying Scheme*	Part Number	Description	Keying Scheme*
SF1187-6006	ZMA Plug to 3.5mm Plug	90°	SF1122-6031	ZMA Plug to SMA Jack	90°
SF1187-6007	ZMA Plug to 3.5mm Jack	90°	SF1122-6023	ZMA Jack to SMA Plug	90°
SF1187-6002	ZMA Jack to 3.5mm Plug	90°	SF1122-6035	ZMA Jack to SMA Jack	90°
SF1187-6003	ZMA Jack to 3.5mm Jack	90°	SF1122-6010	ZMA Plug to TNC Plug	90°
SF1187-6027	ZMA Plug to ZMA Plug	90°	SF1122-6016	ZMA Jack to TNC Plug	90°
SF1187-6025	ZMA Jack to ZMA Plug	90°	SF1122-6019	ZMA Jack to TNC Jack	90°
SF1187-6029	ZMA Jack to ZMA Jack	90°			

\* Other keying schemes available.

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